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## **CLAIMS**

- 1. Pest control system comprising the following components:
  - one or more detection units, where each unit comprises means for identifying
    the type of pest and, optionally, the activity of that particular pest and further
    optional means for sensing physical factors which may correlate to that factor,
    and means for electronically communicating the collected data to a local server
    after encryption;
  - a local communication server, where the server comprises means for receiving input from the detection units and means for transmitting said input, optionally after encryption of data, and further optional means for processing and storing said input in an accessible storage medium;
  - a central system server, which may collect and treat data received from one or more discrete and/or remote local communications servers such that the treated data generates an output either as an alarm and/or as a log registration;
- software modules incorporating self-learning in response to generated data and predetermined responses in view of incoming collected data.
  - 2. Control system according to claim 1, c h a r a c t e r i s e d in that the detection unit, when the pest is a rodent, comprises one or more of the following detection sensors: infrared temperature and/or movement sensors, mechanical tripping means, and further bait for attracting the particular rodent, optionally optical means in the shape of digital camera techniques as for example CIF, CCD, or VGA technology cooperating with suitable analysis and recognition software.
- 3. Control system according to claim 1, c h a r a c t e r i s e d in that the detection unit, when the pest is an insect, comprises one or more of the following detection sensors: infrared temperature and/or movement sensors, a plate member comprising a sticky surface arranged such that optical recognition means coupled to a reference database may scan the plate member or, alternatively, the plate member may be placed in a scanner for data collection, or as a further alternative the plate member may be combined with digital camera techniques as for example CIF, CCD, or VGA

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technology cooperating with suitable analysis and recognition software, a source of UVA blacklight and/or a source of pheromone or a source of bait.

- 4. Control system according to any of the preceding claims, c h a r a c t e r i s e d in that the system further comprises means for exterminating pests in the detection unit.
- 5. Control system according to any of the preceding claims, c h a r a c t e r i s e d in that the system further comprises means for transmitting a status report on the current status of the detection unit at predetermined time intervals, and, additionally, is capable of transmitting alarm signals if/when action (activity) is detected in the detection unit.
- 6. Control system according to any of the preceding claims, c h a r a c t e r i s e d in that the central server comprises a database where data from the detection units as well as actions in response to such data is stored, and that the data by means of suitable software may be used in order to predict possible causes of presence of pests, causes of alarm and/or suggest possible actions, and that the collected data is correlated and integrated with the database.
- 7. Control system according to any of the preceding claims, c h a r a c t e r i s e d in that communication between the components in the system takes place via wireless means such as for example GSM or GPRS, or via wire, such as for example LAN network, internet, or especially dedicated wiring.
- 8. Control system according to claim 7, c h a r a c t e r i s e d in that wireless means may comprise Blue tooth technology, Wlan or traditional wireless transmission of data.
- 9. Control system according to any of the preceding claims, c h a r a c t e r i s e d in that one or more detection units, and/or the local communication server, comprise a Local Position System unit or a GPS unit, which LPS or GPS by means of the communication means may convey the components' position.